

WHAT IS CLAIMED IS:

1. A brush holder stay of a rotary electric machine, the brush holder stay comprising:

a ring-shaped stay part that has formed therein on its inner-radial side a through hole having fitted thereinto a sintered oil-impregnated bearing for supporting a rotating shaft; and

a holder portion that is integrally formed on the stay part and that accommodates therein a brush slide in contact with a commutator fitted over the rotating shaft in such a manner that the brush freely moves out from and into the holder portion, wherein the stay part is provided with a concave groove portion located on at least one side of the holder portion in the circumferential direction and the concave groove portion is formed with an end wall on the inner radial side and having a depth in the axial direction of the rotating shaft so as to serve as an oil pool for an oil path which goes from the through hole toward the outer-radial side of the holder portion via the stay part.

2. The brush holder stay of a rotary electric machine according to claim 1, wherein the end wall is formed so as to be connected to an inner-radial side end surface of the holder portion.

3. The brush holder stay of a rotary electric machine according to claim 1, wherein the concave groove portion has substantially a same length as the that of the holder portion in the radial direction.

4. The brush holder stay of a rotary electric machine according to claim 2, wherein the concave groove portion has substantially a same length as the that of the holder portion in the radial direction.

5. The brush holder stay of a rotary electric machine according to claim 1, further comprising a terminal-fixing portion, wherein the concave groove portion is formed between the holder portion and the terminal-fixing portion formed adjacent to the holder portion.

6. The brush holder stay of a rotary electric machine according to claim 2, further comprising a terminal-fixing portion, wherein the concave groove portion is formed between the holder portion and the terminal-fixing portion formed adjacent to the holder portion.

7. The brush holder stay of a rotary electric machine according to claim 3, further comprising a terminal-fixing portion, wherein the concave groove portion is formed between the holder portion and the terminal-fixing portion formed adjacent to the holder portion.

8. The brush holder stay of a rotary electric machine according to claim 4, further comprising a terminal-fixing portion, wherein the concave groove portion is formed between the holder portion and the terminal-fixing portion formed adjacent to the holder portion.

9. A brush holder stay of a rotary electric machine, the brush holder stay comprising:

a ring-shaped stay part that has formed therein, on its inner-radial side, a through hole having fitted thereinto a sintered oil-impregnated bearing for supporting a rotating shaft; and

a holder portion that is integrally formed on the stay part and that accommodates therein a brush slide in contact with a commutator fitted over the rotating shaft in such a manner that the brush freely moves out from and into the holder portion, wherein the stay part is provided with a concave groove portion that is located on inner-radial side end surface between the holder portion and the through hole and concave in the outer-radial direction of the rotating shaft so as to serve as an oil pool for an oil path which goes from the through hole toward the holder portion.

10. The brush holder stay of a rotary electric machine according to claim 1, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.

11. A The brush holder stay of a rotary electric machine according to claim 2, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.

12. A The brush holder stay of a rotary electric machine according to claim 3, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.

13. A The brush holder stay of a rotary electric machine according to claim 4, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a

positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.

14. A The brush holder stay of a rotary electric machine according to claim 5, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.

15. A The brush holder stay of a rotary electric machine according to claim 6, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.

16. A The brush holder stay of a rotary electric machine according to claim 7, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.

17. A The brush holder stay of a rotary electric machine according to claim 8, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.

18. A The brush holder stay of a rotary electric machine according to claim 9, wherein the brush holder stay has formed thereon a pair of holder portions diametrically opposing each other in the radial direction and the paired holder portions are disposed in a positional relationship wherein they oppose each other substantially in the up-and-down direction relative to a horizontal rotating shaft axis.